

THE 2004 ANNUAL REPORT OF *BOREAL PARTNERS IN FLIGHT*

August 2005

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INTRODUCTION

The 13th year of Boreal Partners in Flight (BPIF) was another productive year for the group. Steve Matsuoka's retirement from the BPIF chairmanship required the recruitment of two volunteers to fill his rather large shoes. We thank Steve for his outstanding leadership.

We continued to make progress on addressing species of concern, notably by implementing an education and outreach effort focused on five priority species. After much discussion, the group determined that it was most realistic to focus new efforts on just one species. Because it is likely the most imperiled of the five species, a task force was formed to focus on Rusty Blackbirds. We look forward to a report on their accomplishments at the 2005 annual meeting.

Additional BPIF highlights in 2004 included:

- There was some progress made with implementation of the Alaska Landbird Monitoring Survey (ALMS), including: a revision of the habitat protocols, some new participants, and signing of the Memorandum of Understanding (MOU) by nine participating agencies and organizations. Access to plots and the cost of the survey (often linked) continue to be the major issues hindering wider participation. Now that the MOU has been signed, we need to garner more formal support for ALMS from within each organization and work to overcome the remaining obstacles.
- Data from the Alaska Off-road Breeding Bird Survey (1992–2004) were sent to John Sauer, USGS Patuxent Wildlife Research Center, for a joint statistical analysis with roadside Breeding Bird Survey data from Alaska. Results of the population trend analysis are not yet available.
- A committee was formed to write a monitoring framework document for Alaska landbirds. Significant progress was made in 2004, and the document should be completed in 2005.
- A new collaboration developed among the four migration-monitoring stations in Alaska and those in the Yukon Territory. Participants in the Alaska-Yukon Migration Monitoring Network will be working to standardize data collection methods and scores in 2005, with an eventual goal of completing large-scale data analyses.
- Substantial education and outreach efforts were undertaken throughout Alaska and the Yukon, including festivals, youth programs, development of teaching materials and birding resources, bird-banding demonstrations, radio programs, and citizen science initiatives.

We have adopted a new format for the annual report this year. This document summarizes the business/administrative-oriented topics of BPIF, including a summary of the annual meeting. Stealing an idea from the Alaska Shorebird Working Group, we will now publish project summaries in a separate document. These will include results of inventory, monitoring, and research efforts done on landbirds in the BPIF area (although work done on wintering grounds may be appropriate). The project summary, distributed in June 2005, was compiled and edited by Chris Harwood. He enlisted the help of the respective BCR coordinators to solicit and obtain summaries from ornithologists working in their regions.

We thank everyone who contributed to this report.

Nancy DeWitt and Chris Harwood, Co-chairs

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Current leadership for Boreal Partners in Flight

CO-CHAIRS

Nancy DeWitt
Christopher Harwood

STEERING COMMITTEE

Melissa Cady
Ellen Campbell
Nancy DeWitt
Chris Harwood
Steve Matsuoka
Paul Meyers
Wendy Nixon
Susan Savage

BIRD CONSERVATION REGION COORDINATORS

Heather Renner, *Aleutian/Bering Sea Islands* (BCR 1)
Rob McDonald and Brian McCaffery, *Western Alaska* (BCR 2) and
Debbie Nigro and Steve Kendall, *Arctic Plain and Mountains* (BCR 3)
Carol McIntyre, Nikki Guldager, and Melanie Cook, *Northwestern Interior Forests* (BCR 4)
Michelle Kissling, *Northwest Pacific Rainforest* (BCR 5)

INVENTORY AND MONITORING COORDINATORS

Steve Matsuoka, *North American Breeding Bird Survey, Monitoring Avian Productivity and Survivorship*
Colleen Handel and Melissa Cady, *Alaska Landbird Monitoring Survey, Alaska Off-road Breeding Bird Survey*
Buddy Johnson, *Migration Monitoring*
Carol McIntyre, *Diurnal Raptors*
Jack Whitman, *Owl Monitoring Working Group*

OUTREACH AND EDUCATION

Tricia Blake

THE 2004 ANNUAL MEETING OF *BOREAL PARTNERS IN FLIGHT*

U.S. Fish and Wildlife Service, Gordon Watson Conference Room, 1011 E. Tudor Road, Anchorage, Alaska

Introduction

On December 8-9, 2004, the members of *Boreal Partners in Flight* met to discuss the conservation of landbirds in Alaska. Many of the presentations at the meeting can be viewed at BPIF website (<http://www.absc.usgs.gov/research/bpif/bpif.html>; under PIF meetings). The following are some of the highlights from the meeting:

- A long discussion on declining species, with considerable time spent addressing the demise of Rusty Blackbirds. To that end, a Rusty Blackbird working group was formed which includes the following members: Wendy Nixon and Pam Sinclair, *Canadian Wildlife Service*; Steve Matsuoka

and Chris Harwood, *U.S. Fish and Wildlife Service*; Carol McIntyre, *National Park Service*; Susan Sharbaugh, *Alaska Bird Observatory*; Stan Senner, *Audubon Alaska*; Jodi McClory, *Alaska Natural Heritage Program*; Herman Griese, *Dept. of Defense (Elmendorf AFB)*; and Colleen Handel, *U.S. Geological Survey-Biological Resources Division*. Other folks offered to assist the committee by providing data, etc.

- Chris Harwood proposed the splitting of the annual report into an administrative record (i.e., this report) and a project summary (already compiled and distributed). Harwood volunteered to serve as editor; Carol McIntyre volunteered to assist in recruiting summaries.
- There were some impressive efforts by participants in the Alaska Landbird Monitoring Survey (ALMS), including Tongass National Forest, Alaska Peninsula/Becharof NWRs, and Alaska Department of Fish and Game. Melissa Cady reported that we're starting to be able to make density estimates for some species, especially for the Tongass. Colleen Handel led a discussion focusing on ideas for overcoming some of the obstacles to increased participation in the survey. Colleen was assisted by a panel of some of our more analytically-inclined members who will help analyze recommendations generated from the discussions.
- Along the ALMS lines, Bill Thompson presented a preliminary field evaluation on measurement error associated with distance estimation (i.e., if you detect a bird [primarily aurally], how accurate is your distance estimate?). Bill was looking for volunteers to assist in these field trials, especially observers who collect lots of data (i.e., do lots of point counts with different species, in different habitats/terrain, etc.).
- One of the last things discussed was the adoption of a steering committee. This committee would help to set strategic goals, provide agenda items, provide vision for the direction of BPIF, review position papers, etc. The impetus for the group is to better utilize the talents of the membership and to decentralize some of the responsibility/workload of the chair(s). The committee will be comprised of 8 people, including 5-6 obligate members and 2-3 at-large members. Members will serve 2-year terms and about half the committee will be replaced annually, the remaining members providing continuity. The steering committee would not replace our *ad hoc* working groups (e.g., Rusty Blackbird working group, Monitoring framework group, ALMS habitat group, etc.).

Obligate:

- BPIF chair or co-chairs (presently Chris Harwood and Nancy DeWitt)
- USFWS-Migratory Bird Mgmt Landbird coordinator (presently Steve Matsuoka)
- USGS-BRD landbird research biologist (presently Melissa Cady was "volunteered")
- Canadian representative (presently Wendy Nixon of CWS-Yukon)
- NGO representative (co-chair Nancy, of ABO, will satisfy this position initially)

At-large:

- Ellen Campbell and Paul Meyers (both of USFS) and Susan Savage (USFWS)

- In attendance were no fewer than 64 people, including:

Alaska Bird Observatory: Nancy DeWitt, Susan Sharbaugh, Tim Walker

Alaska Department of Fish and Game: Steve Lewis, Dale Rabe, Mary Rabe, Dave Tessler, Jack Whitman, John Wright

Alaska Natural Heritage Program: Jodi McClory

Albert Creek Banding Station, Yukon Territory: Ted Murphy-Kelly

American Bird Conservancy: Bob Altman

Audubon Society: Eric Myers, John Schoen, Stan Senner, Iain Stenhouse

Bureau of Land Management: Debbie Nigro

Canadian Wildlife Service: Wendy Nixon

National Park Service: Melanie Cook, Nikki Guldager, Carol McIntyre, Bill Thompson

Unaffiliated: Cathy Pohl

U.S. Air Force: Gene Augustine, Herman Griese, Mary Weger

U.S. Army: Chris Garner, Jeff Mason

U.S. Fish and Wildlife Service: Donna Dewhurst, Maureen deZeeuw, Chris Harwood, Mike Jacobson, Danielle Jerry, Jim Johnson, Bud Johnson, Steve Kendall, Michelle Kissling, Ellen Lance, Rick Lancot, Bob Leedy, Karin Lehmkuhl, Rob MacDonald, Steve Matsuoka, Joel Reynolds, Bill Schaff, Kristin Sesser, Hank Timm, Tom Van Pelt, Kent Wohl
U.S. Geological Survey: Melissa Cady, Bob Gill, Colleen Handel, Karen Oakley, Lisa Pajot, Dan Ruthrauff, Joel Schmutz, Lee Tibbitts
USDA Forest Service: Mary Ann Benoit, Bridget Brown, Ellen Campbell, Dennis Chester, Jerry Mastel, Paul Meyers, Aaron Poe

Agenda

Wednesday, December 8th

Introductions, program updates

- 8:30 Welcome, introductions, and agenda. *Nancy DeWitt, Alaska Bird Observatory*
- 8:50 Update on the national and western regional programs. *Bob Altman, American Bird Conservancy*
- 9:10 Update on State of Alaska Comprehensive Wildlife Conservation Strategy (CWCS) and ADF&G Partner Program. *Mary Rabe, ADFG*
- 9:30 Update on landbird conservation in Canada. *Wendy Nixon, Canadian Wildlife Service*
- 9:55 International Polar Year Initiative. *Wendy Nixon, Canadian Wildlife Service*
- 10:10 Break
- 10:30 Update on BCR4 All Bird Conservation Plan. *Susan Sharbaugh, Alaska Bird Observatory*
- 10:50 Raptor Update: overview of current work. *John Wright, AK Dept. of Fish and Game*

Conservation issues

- 11:10 Regional updates on current and emerging issues challenging the conservation of landbirds in Alaska. *BCR Coordinators (Rob MacDonald, Togiak NWR; J. Wright, ADFG; Debbie Nigro, BLM; Michelle Kissling, U.S. Fish & Wildlife Service- Juneau; Heather Renner, Alaska Maritime NWR)*
- 11:40 Statewide updates on conservation issues: NGO updates: *John Schoen, Audubon Alaska... Other speakers (Nature Conservancy, ABO, etc.)*
- 12:10 Lunch.

Species at Risk, declining species

- 13:20 Overview of declining species, etc. (discussion of myriad “species of concern” lists). *Steve Matsuoka, USFWS/MBM*
- 13:35 Update on Species at Risk “poster children” (Olive-sided Flycatcher, Blackpoll Warbler, Smith’s Longspur, Rusty Blackbird). *John Wright, ADFG; Jim Johnson, USFWS/MBM; Melanie Cook, NPS/Deb Nigro, BLM; Susan Sharbaugh/ABO, respectively.*
- 14:10 Open discussion of landbird conservation issues: “immediate” issues (e.g., logging, oil/gas development) versus “distant” issues (e.g., global warming/climate change, water rights, etc.) AND declining species: ramifications for statewide monitoring strategies, research, etc. *BPIF members; moderators: Colleen Handel, USGS/BRD and Stan Senner, Audubon Alaska.*
- 15:10 Break
- 15:25 Continue open discussion of conservation issues and declining species; revise BPIF goals/objectives in light thereof???
- 16:00 Other Species of Concern:
 - “Prince of Wales” Spruce Grouse. *Michelle Kissling, USFWS*
 - Black Swift. *Bob Altman, American Bird Conservancy*
 - Arctic Warbler. *Alaska Bird Observatory*
 - McKay’s Bunting. *Steve Matsuoka and Jim Johnson, USFWS/MBM*
 - Aleutian Islands Landbirds (rat control efforts). *Heather Renner, Alaska Maritime NWR*
- 16:45 Other Landbird Research:
 - Presentations and those presenting to be announced*
- 17:15 Adjourn

Thursday, December 9th

- 8:00 Introduction to the day’s topics. *Chris Harwood, Kanuti NWR*

Education and Outreach updates

- 8:05 Overview. *Nancy DeWitt, Alaska Bird Observatory*

8:25 BPIF Website. *Steve Matsuoka, USFWS/MBM*
 8:45 Annual Report and proposed Project Summary. *Chris Harwood, Kanuti NWR*

Monitoring bird populations

9:05 Update on the Alaska Landbird Monitoring SYSTEM framework document. *Karen Oakley, USGS/BRD*
 9:25 Update on 2004 Breeding Bird Survey effort. *Steve Matsuoka, USFWS/MBM*
 9:45 Update on 2004 Migration Monitoring effort. *Bud Johnson, Tetlin NWR*
 10:05 Break
 10:25 Update on monitoring program in Denali National Park & Preserve. *Carol McIntyre, Denali National Park & Preserve*
 10:45 Update on 2004 Alaska Landbird Monitoring SURVEY effort:
 MOU update. *Steve Matsuoka, USFWS/MBM*
 Habitat module progress. *Melissa Cady, USGS/BRD*
 2004 participation/results. *Melissa Cady, USGS/BRD*
 11:20 Review of Alaska Landbird Monitoring SURVEY by first-time participants. *Kristin Sesser, Alaska Peninsula/Becharof NWRs; Dave Tessler, ADFG; other members.*
 12:00 Lunch
 13:10 Discussion: Continuing obstacles to wide-scale participation in the Alaska Landbird Monitoring SURVEY and strategies to mitigate (e.g., limiting habitats available in sampling universe, etc.). *Colleen Handel, USGS/BRD and then members*
 13:50 Distance estimation (e.g., efforts to reduce error, etc.). *Colleen Handel, Bill Thompson, USGS/BRD*
 14:20 Discussion: Training issues. *Moderator: Carol McIntyre, Denali National Park & Preserve*
 15:00 Break

Inventorying landbird populations, closing business

15:20 A 2004 inventory of riparian habitats in Gates of the Arctic NPP. *Nikki Guldager, National Park Service*
 15:40 An integrated inventory on Kanuti NWR, *Chris Harwood*
 16:00 Future business...
 Is BPIF functioning optimally?
 Does BPIF need a steering committee?
 Should we be updating the Alaska Landbird Conservation Plan?
 Where do gamebirds fit in with BPIF?
 Other???

17:00 Adjourn

PROGRAM ADMINISTRATIVE UPDATES

Update on the National Partners in Flight Program

(Compiled from meeting notes)

The PIF Continental Plan has been distributed and is also available as a .pdf file at www.partnersinflight.org. New features include estimates of population sizes, population objectives, a new PIF Watch List and list of Stewardship Species, and the concept of avifaunal regions (bird conservation regions, or BCRs). The next version will incorporate wintering priorities, an updated species assessment database, monitoring priorities for Watch List species, and Mexican species, which will bring another 450 species of landbirds into the Plan. Species assessments for the entire Mexican avifauna should be completed by year-end. There is considerable interest in Mexico to have the plan address all birds, rather than just landbirds.

PIF has secured grant funding to update and maintain the Species Assessment Database. A new version with new scores will be completed soon. Setting quantifiable biological objectives has increased in importance, as has the need to coordinate objectives across borders. We now have population estimates for four bird initiatives (landbirds, waterfowl, shorebirds, and waterbirds). An independent peer review of the PIF population estimate process has been completed and the report will be submitted to *The Auk*. The outcome was basically positive and PIF will now focus on refining the process by addressing the review team's concerns, including pair-correction and distance-correction factors. PIF is interested in looking at datasets using distance-detection and analyzed using the program DISTANCE.

Contact: Bob Altman, Science Coordinator, Pacific Rainforest Bird Conservation, 311 NE Mistletoe Circle, Corvallis, OR 97330. Email: baltman@abcbirds.org

Updates on the Alaska Department of Fish and Game's Partner Program, and Comprehensive Wildlife Conservation Strategy (CWCS)

Compiler: Mary Rabe, *Alaska Department of Fish and Game*

Funding for the State Wildlife Grant Program is based on an annual congressional appropriation, remains steady, and continues to bring about \$3 million in federal funds to the state of Alaska each year. We anticipate using \$500,000 each year for the ADFG Partner Program, with an initial emphasis on filling information gaps through surveys and database development. Eighteen projects were funded in 2004. These projects must provide 25% of the expenses from non-federal sources. Additional information can be found at <http://www.wildlife.alaska.gov/management/nongame/nongame.cfm>

Work on the state's CWCS continues; the final Strategy should be approved by US Fish and Wildlife Service before October 2005. The Strategy was developed with the help of 14 expert groups, who developed objectives, targets, measures, and conservation actions for 74 featured species. National benefits of the CWCS include a proactive approach to wildlife conservation, the ability to summarize the conservation needs of wildlife nation-wide, and an impetus for increased conservation funding. Accomplishments of the CWCS will be maximized through collaboration and coordination with partner agencies and organizations, with formal review of each state's strategy every 10 years. Additional information can be found at <http://www.sf.adfg.state.ak.us/statewide/ngplan/>

Contact: Mary Rabe, Alaska Department of Fish and Game, Division of Wildlife Conservation, P.O. Box 25526, Juneau, AK 99802-5526. Phone: (907) 465-6195; e-mail: mary_rabe@fishgame.state.ak.us

Update on Landbird Activities from Yukon Territory - 2004

Compiler: Wendy Nixon, *Canadian Wildlife Service*

Expanded roadside wetland surveys

- Wetlands surveyed for the past 12 years provide data for developing population indexes for waterfowl – it is a cooperative program
- In 2004 this was expanded to include Solitary Sandpiper, Wilson's Snipe, Lesser Yellowlegs, Rusty and Red-winged blackbirds, and Sora
- Wetlands surveyed 5 times each spring
- 180 wetlands in 5 "strata"
- 100 new wetlands added this year on a trial basis

Rusty Blackbird – Scoping

Pam Sinclair

- conducted 12 "extra" BBS routes – 11 RUBL on 6 routes – 300 points (low)
- Roadside Waterfowl Survey – 46 RUBL at 85 of 280 wetlands (better)
- 2 nests found, also fledglings
- observations of behavior, feeding
- banding next fall

Kluane Ecological Monitoring Program

- Landbirds are one of 16 indicators used to monitor ecological integrity in the Kluane region.
- The intent is to track trends in avian populations and gather baseline density and composition data on forest birds in the Kluane region
- Point counts are done annually at six different sites (4-8 points each) in Kluane as a pilot project
- Need to determine how many points are needed to detect population trends
- Program is expanding to include monitoring in Mayo and Watson Lake
- "Community Ecological Monitoring Program"

Monitoring resident species

- Goal is to track changes in resident bird density and distribution – woodpeckers in particular
- Search is for a low cost methodology – increase the likelihood of continuing monitoring over an extended period
- If funding is available, a pilot project will be run in southwest Yukon in the area of extensive spruce bark beetle altered forest

Breeding Bird Survey in the Yukon

- The BBS is a volunteer survey. In the Yukon, there have been between 11 and 16 participants each year since 1998.
- There are many options for off road BBS routes, but a limited number of volunteers (aging)

Migration Monitoring

support from many sources – CWS is one contributor

- Albert Creek
- Teslin Lake

Surveys done primarily by volunteers

- Christmas Bird Count (6 Yukon communities)
- Nocturnal Owl monitoring (20 surveys on 16 routes)
- International Migratory Bird Day Count

Planning

- An "all bird" plan is being developed for the Yukon within CWS (in very rough draft stage)
- A PIF Conservation Plan for BCR #4 will be developed by several BPIF partners...

- A Canadian national program to monitor birds in the boreal forest is under construction (BCR 4, 6, 7, 8) led by Mike Norton and Craig Machtans

Proposed Canadian Boreal Bird Monitoring Program

One of the guiding principles:

“An integrated approach across the boreal region”

“... Approaches and designs would also be linked with adjacent areas, such as the boreal forest in Alaska....”

Contact: Wendy Nixon, Canadian Wildlife Service, 91782 Alaska Highway, Whitehorse Y1A 5B7
(867) 667-3929, fax: (867) 667-7962, email: wendy.nixon@ec.gc.ca

International Polar Year: 2007-2008

Compiled from meeting notes.

See www.ipy-api.ca/english to learn more about this time-limited, international initiative. The IPY will include a broad range of activities organized around a select number of scientific themes. A major goal is to determine the present environmental status of polar regions (which Canada has defined as reaching to the southern limit of discontinuous permafrost), with an emphasis of data management. The initiative is currently in the pre-proposal stage.

Wendy Nixon and others are working on a pre-proposal on *Population Status of Northern Birds*, which has an estimated cost of \$1.4 million. They are reluctant to develop a full proposal until it is clear that funds will be available. The project would involve local people, which enhances ability of a community to identify priority land (including wetland) areas for stewardship, thereby ensuring that resident bird populations are maintained.

Is there interest from BPIF in collaborating? Danielle Jerry is interested in cross-programmatic and cross-agency support with the USFWS. We should propose a project to Ted Stevens in order to try and secure funding for the initiative in the U.S.

BCR 4 All Bird Conservation Plan Update Summary

Compiler: Susan Sharbaugh, *Alaska Bird Observatory*

The North American Bird Conservation Initiative (NABCI) was proposed in 1999 as an effort to coordinate the efforts of various avian conservation initiatives directed at the taxon level. Integral to NABCI is the concept of Bird Conservation Regions (BCRs) and development of all bird conservation plans at this regional level. The Alaska Bird Observatory (ABO) has been awarded a grant from Alaska Department of Fish and Game through the Non-game Partner Program to develop the All Bird Conservation Plan for BCR4. BCR4 encompasses the interior boreal forest of Alaska, Yukon, and northern British Columbia. Current partners in this venture are U. S. Fish and Wildlife Service, Canadian Wildlife Service-Yukon, Canadian Wildlife Service-British Columbia, Ducks Unlimited Canada Inc.-Yukon, and Alaska Department of Fish and Game.

In the BCR4 All Bird Conservation Plan ABO proposes bring partners together to: 1) assess the conservation status of all recognized avian taxa that regularly occur in BCR4, 2) identify priority species and subspecies, 3) describe habitats used by those priority species, 4) identify threats to priority species and habitats, 5) identify specific needs for inventory, monitoring, research, and conservation, and 6) identify the best options for implementation. We need representatives from each avian conservation initiative (shorebirds, landbirds, waterfowl, seabirds, and raptors), people to help review the document at

various stages, people to help write the document, and additional funding (cash or in-kind) to make this project succeed.

Contact: Susan Sharbaugh, Senior Biologist, *Alaska Bird Observatory*
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Department of Defense (DoD) Partners in Flight Update

Compiler: Gene Augustine, *U.S. Air Force*

As the Alaska DoD PIF Western Region, Working Group Representative I announced to the Boreal PIF the planning of the 2005 national meeting of the DoD PIF working group to occur in Alaska. At that time I indicated the meeting was tentatively to occur in Fairbanks during mid-May with a possible trip to Eareckson Air Station, Shemya Island in the Aleutians during the peak of migration of Asian species. The meeting will be primarily for the working group members and DoD PIF representatives from Alaska installations. Since that announcement the meeting date has been pushed back to June 14-16. The meeting will occur at Fort Wainwright, on the outskirts of Fairbanks. There will be limited space for BPIF members to attend the session on June 14. Tentative arrangements are being made for many of the working group members to travel to Nome, Alaska, June 9-13 at their own expense, since June does not correspond to the spring migration at Shemya Island. BPIF members may also inquire as to space available to accompany the group to Nome. As a goal, travelers to Nome plan to spend one day at the Army National Guard's Stewart River Training Area, enlarging as much of as possible the breeding bird survey area if helicopter support is provided.

Contact: Gene V. Augustine, U.S. Air Force 611 CES/CEVP, 10471 20th St., Ste 302, Elmendorf AFB, AK 99506-2200, gene.augustine@elmendorf.af.mil

BIRD CONSERVATION

Species at Risk! A Poster Series for the 10th Alaska Bird Conference

To present our concerns for our highest priority species, members of Boreal Partners in Flight developed a series of posters for the Alaska Bird Conference (March 16-18, 2004) that summarized information on the species in urgent need of research to identify threats to populations, determine causes for long-term declines, and develop conservation actions to reverse these trends. The abstracts from these posters are included below. (Note: These abstracts were included in the 2003 BPIF Annual Report. However, the major theme of conservation for the 2004 annual meeting warrants their inclusion again.)

Species at Risk! – Solitary Sandpiper (*Tringa solitaria*)

Brian J. McCaffery^{1*} and Christopher M. Harwood²

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² U. S. Fish and Wildlife Service, Kanuti National Wildlife Refuge, 101 12th Ave., Fairbanks, AK 99701

Among North American shorebirds, the Solitary Sandpiper (*Tringa solitaria*) is the only tree-nesting species, laying its eggs in the old nests of boreal forest songbirds. Beyond anecdotal accounts of this unique behavior, however, the breeding biology of this species is virtually unknown. Despite having one of the largest breeding ranges of any North American sandpiper, the current continental population is estimated to be only 25,000 individuals. The estimated population size of the Alaska-breeding race, *T. s. cinnamomea*, is only 4,000 individuals. The quality of these estimates, however, is quite poor. Breeding Bird Survey (BBS) data from Alaska since 1980 reveal a population decline of 4.1%/year ($P = 0.02$, $N = 20$ routes), suggesting that the Alaskan population today is only a third as large as it was a quarter century ago. Although not statistically significant, a comparable rate of decline has been estimated from Canadian BBS data since 1966. Because of the rapid rate of decline in Alaska (and perhaps Canada), comparable declines in co-occurring species, the extremely small population estimate for *T. s. cinnamomea*, and uncertainty about the accuracy of these estimates, the Solitary Sandpiper has been identified by Boreal Partners in Flight as a species of high conservation concern. High priority conservation actions include: a) generating a more detailed synthesis of survey results to date, b) developing an adequate survey methodology for generating accurate and precise population estimates, c) identifying and protecting those sites and habitats where the species does congregate during migration, d) determining the regions and habitats preferred by this species in its Neotropical wintering grounds, and e) identifying and, if possible, reversing the factors contributing to the species' decline in Alaska.

Species at Risk! – Olive-sided Flycatcher (*Contopus cooperi*)

John M Wright, Alaska Department of Fish & Game, Fairbanks, AK 99701,
john_wright@fishgame.state.ak.us.

Throughout its broad breeding range extending across North America's boreal forest and the west's montane forests, the Olive-sided Flycatcher is listed by state, provincial and federal agencies as a species of conservation concern. Widely recognized as a characteristic bird of the coniferous forest, this conspicuous species has exhibited significant and consistent declines in abundance over time and space. North American Breeding Bird Survey trend results range from -3.42 to -3.80% per year ($p < 0.00002$) for Survey-wide, Canada, and USA areas, for both 1966-2002 and 1980-2002 periods. In Alaska, BBS trends (-3.3% per year, $p = 0.09$, 49 routes, 1980-2002) are very similar. Declines of 3.5% per year equate to a 54% decline over 22 years (1980-2002) and 72% since the start of the BBS in 1966. Alaska is a very important part of its breeding range, supporting close to 25% of the estimated global population of

4,700,000. Like most passerines, few studies have been conducted during the breeding season; and like most Neotropical-wintering migrants, even less work has been done in winter or migration. In light of the consistently high level of decline throughout its breeding range, including pristine as well as heavily logged forests, initial concern -- though no research -- has focused on its wintering range. Its primary wintering habitat in mature evergreen forests of low-mid elevation in the Northern and Central Andes is one of the most heavily altered habitats in South America. Andean valleys are almost completely deforested, and 85% or more of montane forests have been cut. Contaminants are also a potential threat to this insectivore that preys on large flying insects. In Alaska, more information needs to be gathered in the Northern Pacific Rainforest BCR and in riparian forests within the NW Interior Forest BCR.

Species at Risk! – Blackpoll Warbler (*Dendroica striata*)

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Although widespread across the Boreal region of Canada, ne. U.S., and Alaska, the Blackpoll Warbler (*Dendroica striata*) has been listed as a species of high conservation concern by Boreal Partners in Flight and the Canadian Wildlife Service as a result of persistent population declines throughout its breeding range. Data from the North American Breeding Bird Survey indicate this species has suffered the steepest long-term decline of any Neotropical-Nearctic migrant landbird with populations diminished since 1980 by 54% and 90% across breeding ranges in Alaska and Canada respectively. Effective conservation of any species requires an understanding of population dynamics, habitat requirements, and threats throughout its annual cycle. The Blackpoll Warbler has been poorly studied throughout its range thus much of this basic information is not readily available, particularly in Alaska. As a first step towards addressing the conservation of Alaska's species of highest conservation concern, this poster summarizes information on the ecology, abundance, threats, and short- and long-term population trends of the Blackpoll Warbler. In addition, the key research priorities for this species that must be addressed by Alaska's scientific and academic communities are identified.

Species at Risk! – Smith's Longspur (*Calcarius pictus*)

Melanie Cook¹ and Debbie Nigro^{2*}

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As one of the least known North American birds with a restricted range and population size, Smith's Longspur (*Calcarius pictus*) has been listed as a species of high conservation concern by Boreal Partners in Flight and the Canadian Wildlife Service. Data from the North American Breeding Bird Survey are too scarce to produce any population trend information for this species. Effective conservation of any species requires an understanding of population dynamics, habitat requirements, and threats throughout its annual cycle. The Smith's Longspur has been poorly studied throughout its range thus much of this basic information is not readily available, particularly in Alaska. As a first step towards addressing the conservation of Alaska's species of highest conservation concern, this poster summarizes information on the ecology, abundance, threats, and population trends of the Smith's Longspur. In addition, the key research priorities for this species that must be addressed by Alaska's scientific and academic communities are identified.

Species at Risk! – Rusty Blackbird (*Euphagus carolinus*)

Kevin C. Hannah, Alaska Bird Observatory, P.O. Box 80505, Fairbanks, AK 99708.

The Rusty Blackbird is the least well known of the North American blackbirds, as no definitive studies have been conducted on this species to date. Breeding north to treeline, this species is uncommon and

local in wet forests, bogs, and swamps in Alaska, Canada, and the northeastern United States. Recent estimates suggest that Rusty Blackbird populations have declined by as much as 90% in recent decades. Survey-wide Breeding Bird Survey (BBS) data suggest annual declines of approximately -10.7%/yr from 1966–2002, showing one of the steepest population declines among species surveyed by the BBS. In Alaska, the BBS is clearly insufficient for monitoring this species, largely due to the inaccessibility of much of this species' breeding range in the state. The Rusty Blackbird was selected by Boreal Partners in Flight as a candidate for future research in Alaska, and is currently a candidate for Partners in Flight Watch List status across the continent. As a first step towards addressing the conservation of Alaska's priority bird species, this poster summarizes information on the ecology, distribution, abundance, and limiting factors for the Rusty Blackbird. In addition, the key research priorities for this species in Alaska are identified.

Conservation Issues and Fieldwork Updates from Bird Conservation Regions Coordinators

The "greater BPIF" area is comprised of five Bird Conservation Regions (BCRs). The following are reports on primary conservation issues for each BCR, as well as a summary of some of the avian fieldwork that was done in each BCR in 2004. Projects listed with an asterisk (*) have synopses in this document's sister report, the Project Summary.

Aleutian and Bering Sea Islands (BCR 1)

Compiler: Heather Renner, *U.S. Fish and Wildlife Service, Alaska Maritime National Wildlife Refuge (AMNWR)*

Current conservation issues:

Invasive Species – many islands in the Aleutians and Bering Sea have introduced mammals (e.g., foxes, rats, voles, squirrels, cattle, reindeer, horses) that threaten biodiversity, and bird populations in particular. AMNWR conducted projects in 2004 on Adak, Avatanak, and Tanaga Islands to remove introduced arctic foxes, and on Kiska and Bay of Islands, Adak to study techniques for future removal or control of introduced rats.

Endemism – because it is composed of islands, the BCR harbors a relatively high number of endemic subspecies and species. Recent genetic work by UAF (e.g., Song Sparrows [Pruett 2004]) has highlighted the importance of the region.

Shipwrecks occur frequently in the region; two occurred in the Aleutians in 2004. Associated risks are rat introductions and oil spills. In December the Selendang Ayu grounded near Unalaska Island and spilled over 300,000 gallons of oil. Besides seabirds and waterfowl, Song Sparrows, American Dippers, Common Ravens, and Bald Eagles were documented to be oiled, and Winter Wrens were also likely at high risk.

Field projects conducted in 2004:

- 1)* Translocation of endemic Evermann's Rock Ptarmigan from Attu Is. to Agattu Is. (AMNWR)
- 2)* Off-road point counts conducted on Shemya, Buldir, Kasatochi & Ugamak (AMNWR)
- 3) Beach passerine surveys conducted on Buldir, Semidis, and Pribilofs (AMNWR)
- 4) Landbird surveys on islets in Bay of Islands, Adak – part of rat control project (AMNWR)
- 5)* Study Song Sparrow behavior on islets with and without rats (Univ. California Santa Cruz)
- 6)* Study songbird use of Aleut village sites on Sanak Island (Idaho State Univ.)
- 7) Raven control to reduce bird air-strike hazard on Shemya (U.S. Air Force)
- 8) Scientific collecting trip to Attu Island (Univ. Alaska Fairbanks museum)

- 9) Birding tours conducted on Attu, Adak, St. George, St. Paul (various groups)

Western Alaska (BCR 2)

Compiler: Rob MacDonald, *U.S. Fish and Wildlife Service, Togiak National Wildlife Refuge*

Current Conservation Issues

A continued decline in the fishing industry has led to increased interest in the development of other renewable and non-renewable resources. This includes: interest in a gold mine north of Iliamna; oil and gas exploration, especially along the Bristol Bay Coastal Plain; and various forms of ecotourism.

The state and Bristol Bay Borough are involved in planning a bridge across the Naknek River.

The Aleutians East Borough and the city of King Cove are constructing a road and hovercraft terminal on the east side of Cold Bay that will be completed in Fall 2005. They continue to push for development of a road to connect the communities of King Cove and Cold Bay that would cross a federally-designated wilderness area and bisect Izembek NWR.

A major concern for the Kuskokwim river is the prospect of a coal-fired power plant in Bethel to power a gold mine (i.e., Donlin Creek) in the upper Kuskokwim River Valley.

There is a continued push to open refuges up to helicopter use especially for recreational anglers.

Ellen Lance (USFWS - Ecological Services) has continued to work with some local villages to monitor the impact of newly erected wind generators.

Field projects conducted in 2004:

Multiple landbird monitoring projects occurred this year in BCR 2, including:

Alaska Peninsula/Becharof NWR completed seven ALMS blocks (*), one BBS route, spring phenology of arriving birds, outreach/monitoring activities (Christmas Bird Count and North American Migration Count), and incidental landbird observations during shorebird inventory point counts and small mammal inventories. An injured Northern Saw-whet Owl was sent to the Bird TLC that was rehabilitated and released back in King Salmon.

Izembek NWR recorded spring chronology of arriving birds and conducted one BBS route, two “old-style” ORBBS routes, and three public bird counts (Christmas Bird Count, Great Backyard Bird Count, and North American Migration Count).

Togiak NWR conducted owl surveys, spring chronology of arriving birds, four BBS routes, bald eagle productivity surveys, four presentations to local classes, four public bird counts (Christmas Bird Count, Great Backyard Bird Count, North American Migration Count, and Project Feeder Watch), and sent an injured Boreal Owl to the Bird TLC.

Arctic Plain and Mountains (BCR 3)

Compilers: Debbie Nigro, *Bureau of Land Management-Northern Field Office* and Steve Kendall, *U.S. Fish and Wildlife Service—Arctic National Wildlife Refuge*

Current Conservation Issues

For BCR 3 we are reporting on issues of conservation concern for federally managed lands within the National Petroleum Reserve (NPR-A) and the Arctic National Wildlife Refuge. Conservation concerns for the NPR-A revolve around continuing exploration and the beginning of development of oil resources in the northeast area of NPR-A. There is also a heightened concern for the lack of information on species composition and harvest levels during spring subsistence hunting for both the NPR-A and the Arctic Refuge.

Conservation concerns on the Arctic Refuge include potential for opening the 1002 area to oil development, a dispute with the State on the location of the northwest boundary of the refuge, proposed offshore exploratory oil drilling in State waters just outside the Refuge, a potential new mainland airport for Kaktovik which may increase ATV access to mainland, increased recreational use of river corridors and barrier islands, and coastal erosion due climate change increasing melting permafrost and causing changes in sea levels and storm impacts. Also, Senate Bill 85 (aka "Seekins Bill") would repeal long-standing restrictions on ORV use in the Dalton Highway corridor, potentially facilitating access to areas such as Gates of the Arctic Park and Preserve and Arctic NWR.

Field projects conducted in 2004:

In 2004 a variety of research was conducted on avian species within or near the NPR-A. Projects included Breeding Bird Survey routes conducted along the Dalton Highway, research on glaucous gulls satellite tagged at the Barrow dump, 3 projects focused on various aspects of king eider biology and habitat use, foraging ecology of common ravens (*) and a project focusing on the physiology of post-breeding shorebirds.

Projects conducted on Arctic Refuge in 2004 included the continuation of a cooperative project investigating nest survival of tundra nesting birds in relation to human development, using habitat association data to develop a predictive model to generate maps showing abundance and distribution of nesting birds in the 1002 Area, breeding raptor surveys on the Hulahula River, surveys of breeding birds on Beaufort Sea coastal islands and surveys of staging post breeding snow geese.

Northwestern Interior Forests (BCR 4)

Compilers: John Wright, *Alaska Department of Fish and Game (retired)*, and Carol McIntyre, *National Park Service - Denali NPP*.

Current Conservation Issues

Wildland Fires- Wildland fires were the major environmental event in 2004 in central Alaska.

Approximately 703 fires burned approximately 6,517,200 acres in Alaska, mostly in BCR 4. Land and fire managers are re-assessing fire suppression in this area for future years. Hopefully managers will maintain limits in remote areas, but there probably will be more clearing and thinning elsewhere.

Oil/Gas Exploration - Exploration is ongoing for shallow gas in and near Nenana/Minto Basin. Potential gas line is planned, but hopefully they will follow the existing corridor. Large companies are not interested in small communities tapping in, so the State is interested in small local development for these communities.

--Yukon Flats/Doyon land exchange for oil/gas exploration.

--Healy Coalbed Methane license applications under study

Mining

--Fairbanks Gold Mining, Inc., operator of the Ft. Knox mine, continues its program of identifying additional sources of gold ore for the Ft. Knox mill. They recently concluded a drilling program at the Gilmore Tracking Station and are currently drilling 64 additional holes at the Ryan Lode on Ester Dome. The True North pits have substantially increased in size.

--Nevadastar Resources is planning to conduct exploratory drilling near 14-Mile Lake and Landmark Gap in the Tangle Lakes region, with proposals for development of new mines in the Tangle Lakes area (platinum and other metals). The Alaska Bird Observatory is studying ecology of Arctic Warblers and will get some data on song birds in the area.

Transportation Corridors

--Railroad. Expansion to Fort Greely and beyond; the State is committed to it.

--Roads. The State of Alaska is talking about developing and improving roads across the North Slope, by using state dollars if cannot get federal funding. On October 5th, 2004, Governor Frank Murkowski

spoke to the Alaska Travel Industry Association, stating that his administration would push for a new northern access route into Denali National Park. The Governor and State are looking into developing “pioneer road” to Savage River, west from Healy area.

--Senate Bill 85 repeals all restrictions on off-road vehicle (ORV) use within the Dalton Highway corridor and may provide easier access into many remote areas.

Global warming

--Drought conditions in many interior forests. Forest stress leading to insect outbreaks, fires, etc.

--Rapid change in landscapes; possible conversion to drier (savannah type) ecosystem including loss of spruce and birch forests.

Subsistence Harvest Effects

--Possible effects from subsistence harvest on many species in the Tanana River Valley especially near Delta, but harvests are not sufficiently monitored (Buddy Johnson, Tetlin National Wildlife Refuge).

Land Management Planning

--The State of Alaska is currently amending its Tanana Basin Area Plan, first developed in 1991.

Bird projects completed in BCR 4 in 2004 included:

---BBS routes

* ---Variable circular plots in Denali NPP

---Song bird migration monitoring near Tok (autumn), in Fairbanks (spring and autumn), and in Denali NPP (autumn).

* ---Arctic Warbler study near Tangle Lakes (by Alaska Bird Observatory with support from BLM, ADFG and others).

* ---Diurnal raptor surveys in central Alaska Range, Denali NPP, upper Yukon River, upper Tanana River, Fortymile River

---Owl surveys in Tanana Valley

Northwest Pacific Rainforest (BCR 5)

Compiler: Michelle Kissling, *U.S. Fish and Wildlife Service, Juneau Field Office*

Comments regarding emerging issues and concerns

This section includes comments, suggestions, and concerns submitted by active BPIF participants in Southeast Alaska. I have simply collated these comments, and therefore, the information below does not necessarily reflect my opinion, but instead are the concerns of BPIF cooperators within BCR 5 – Alaska.

(1) The rapidly advancing Hubbard Glacier and the consequent overflow of Russell Lake may have a tremendous impact on landbird populations along the Situk River. The overflow could cause the Situk River to be five times as wide as the nearby Dangerous River, eliminating very productive riparian habitat. The drainage could be up to 2-4 miles wide, likely eliminating the tern colonies on Blacksand Spit as well. There are many questions and concerns about potential impacts of the Hubbard Glacier closing and Russell Lake overflow on bird habitat. Primary contact: Matt Moran, USFS, Yakutat

(2) Contaminants and West Nile virus were mentioned as concerns/issues for landbird conservation. These issues are not currently being addressed or monitored in Southeast Alaska, and biologists would like to have more expertise devoted to these issues. Two northwestern crows from Southeast Alaska were tested for West Nile virus by Alaska State Virology Laboratory (ASVL) in Fairbanks. Results were negative.

(3) In Southeast Alaska, tourism is increasing annually, and the majority of land-based tourist activities occur along the shoreline. More information describing the level of impact and ways to minimize disturbance would benefit management of these areas.

- (4) While timber harvesting continues to be a management issue in Southeast Alaska, second-growth management is a more immediate issue that needs to be addressed. Although data exist describing the impacts of logging on landbirds, few land managers use this information during the planning process. Implementation of recommended management practices remains an issue.
- (5) Effects of logging on landbirds (especially raptors and other avian species with large home ranges) at multiple spatial and temporal scales are unknown. In addition, road building in roadless areas raise several concerns regarding the viability of landbirds (esp. raptors) and compliance with the 1997 forest plan.
- (6) Habitat capability models for several avian species were developed during the recent forest plan revision. These models are used by biologists during timber sale planning. However, none of these models have been evaluated or verified for accuracy, and most of these models are too simplistic to be valuable. If these models continue to be used, evaluation, verification, and revision must be initiated.
- (7) The effects of global warming on landbirds in Southeast Alaska have received no attention. Several land managers and researchers have raised this as a topic that requires consideration. Arrival dates, length of breeding season and food availability may be affected by changes in climate. Anecdotally many people have noted the early ripening of berries and insect emergence in Southeast Alaska. Furthermore, widespread yellow-cedar blight may be shifting the distribution and abundance of certain landbirds, most notably brown creepers. Although the exact cause is unknown, the distribution of the decline appears to be associated with known climatic patterns in Southeast Alaska, suggesting that change in climate may be contributing or causing mortality of yellow-cedar stands.

Broad-scale monitoring

BBS routes –BBS routes were conducted throughout Southeast and Southcentral Alaska.

Alaska Landbird Monitoring Survey – Nine plots were surveyed in 2004. Juneau Ranger District (n=7) and Cordova Ranger District (n=2) led these efforts.

MAPS – The Juneau MAPS station was operated in 2004. The Hoonah and Yakutat stations were not run this year, due a change in priorities for forest-wide songbird monitoring.

Research and fine-scale monitoring projects

- 1)* *Beach Buffer Study* : Primary investigator, Dave Sperry, Humboldt State University.
- 2) *Distribution and seasonal habitat use of American Dippers in the Juneau area* – In 2003, Mary Willson began a study of dippers in the Juneau area. The principal goals were to map the nests and characterize the streams (watershed area, invertebrate densities, etc.) used for nesting and overwintering, document nest success, assess prey-capture rates (summer vs. winter). She intends to examine possible factors limiting the breeding population (nest sites vs. stream characteristics vs. mortality etc.). Mary continued data collection during the 2004 breeding season, and is planning to conduct fieldwork again in 2005.
- 3)* *Black Swift Inventory*: Primary investigators, Bob Altman, ABC, and Gwen Baluss, USFS.
- 4)* *Northern goshawks*: Primary investigator, Steve Lewis, ADFG.
- 5)* *Cavity-nesting birds*: Primary investigator, Michelle Kissling, USFWS.
- 6) *Owl boxes* – Owl boxes in Juneau and Petersburg were checked in 2004. No owls were observed, but one box in Petersburg did contain skeletal prey remains.
- 7) *Owl surveys* – U.S. Forest Service Petersburg, Thorne Bay, and Yakutat Ranger Districts conducted owl surveys in 2004. In Petersburg, no owls were detected on one survey route. In Yakutat, two surveys were conducted in April, and in total nine northern saw-whet owls, three boreal owls, and one northern pygmy-owl were recorded. In Thorne Bay, three survey routes were conducted, and two northern saw-whet owls were detected. USFWS and ADFG banded and released one northern

pygmy-owl found along side the Douglas Highway in Juneau on October 14, 2004. The owl flew into a car window and was lying on the side of the road. An intensive owl project will begin in February 2005 – contact Michelle Kissling (USFWS) or Steve Lewis (ADFG) for details.

- 8)* Breeding landbird communities in a recently deglaciated landscape: Primary investigators, Jim Saracco, Institute of Bird Populations, and Scott Gende, NPS. See Project Summary document for a synopsis of this study.
- 9)* Prince of Wales Spruce Grouse – U.S. Fish and Wildlife Service, Ecological Services, Juneau, funded two complimentary studies to begin evaluating the status of POW Spruce Grouse. Alaska Department of Fish and Game (Primary investigator: Dale Rabe (ADFG)) is working closely with hunters in southeast Alaska to document distribution, abundance, and level of hunting pressure on this distinct subspecies. USGS Alaska Science Center (Primary investigator: Sandy Talbot (USGS-ASC)) is developing genetic markers for future studies to investigate the phylogeography of this species throughout southeast Alaska. See Project Summary document for a synopsis of Sandy's study.

Education programs

International Migratory Bird Day - USFS, ADFG, Juneau Raptor Center, and USFWS held an International Migratory Bird Day event at the Mendenhall Glacier Visitor Center. On two evenings, we offered a free showing of the film "Winged Migration", and had two experts on hand for questions after the film.

Banding demonstrations - USFS continued to hold banding demonstrations in middle-school classrooms in Juneau and the Hummingbird Festival in Ketchikan. Gwen Baluss also gave a banding demonstration to the Univ. of Alaska Southeast ornithology class.

Seaweed – Many BPIF members contributed to Seaweed, an annual event for Juneau 4th grade student. During this May event on the Mendenhall Wetlands, biologists and naturalists teach short, hands-on lessons about birds to students.

Statewide Conservation Issues

Presented by John Schoen, *Audubon Alaska* (summary compiled from meeting notes).

Iain Stenhouse is the new director of bird conservation for Audubon Alaska. His main task is to complete the statewide Important Bird Areas program. Bering Sea and Cook Inlet IBAs have been completed.

The 2004 election will mean a lot of challenges for conservation work in Alaska. Audubon is very engaged with the Arctic National Wildlife Refuge controversy; also with the Teshekpuk Lake surface protection area being maintained. Oil and gas industries have improved a lot in past decade—very impressed with Alpine. While a single Alpine-like pad is okay, what about incremental expansion of other infrastructure and roads? Molting geese, shorebirds, yellow-billed loons are of primary concern in North Slope area. We need control areas maintained for study.

Audubon is looking at 21 biogeographic provinces in the Tongass Forest in relationship to all birds; want to identify conservation priorities for each province and make information available on the web site. Want to identify watershed priorities; plot high-quality salmon streams. Continued timber focus could unravel ecosystem integrity of this area.

They are also concerned about increased road building, recreation, and other pressures on the Kenai Peninsula. The Nature Conservancy is finishing an ecoregional plan on the Arctic and also working on one that extends into British Columbia.

Contact: John Schoen, Audubon Alaska, 715 L Street, Suite 200, Anchorage, Alaska 99501;
email: jschoen@audubon.org

Landbird Conservation Issues in Alaska: Discussion

Discussion leaders: Colleen Handel, *U.S. Geological Survey* & Stan Senner, *Audubon Alaska*

(Note: this summary was gleaned from the meeting notes)

Issues such as logging (including hazardous fuel reduction, salvage logging, and the corresponding increase in roads caused by logging), resource extraction, wildfires and fire suppression, increasing recreational activity, and climate warming continue to raise concerns in Alaska and the Yukon. Until recently we believed that boreal wetlands offered pristine breeding habitat for species such as Rusty Blackbirds, but now realize that this habitat may be at risk.

How do we identify the most important issues and then initiate/inspire agency and political action?

Suggestions include:

- BPIF should release a statement informing the public and other agencies about BPIF's five species at risk (aka "poster children").
- We need better habitat descriptions for where these birds occur. Mine existing data. If working on habitat models, combine with these species' needs and objectives. Commit to gathering habitat information when doing bird surveys (must define specifically what is needed).
- Audubon Alaska put out a call for information on birds in the Tongass region.
- Include habitat requirements in updated version of the Audubon WatchList.
- CWS is looking at cumulative effects of logging, roads, etc., on boreal forest birds. Stan Senner referred us to the review by the Natural Resources Council on the cumulative effects of oil and gas leasing on the North Slope.
- Develop a template of concrete actions that can be taken, and have BPIF endorse it. Biologists don't have a lot of authority to take action on their own.

Focusing our efforts on one species may be most realistic. Of the five poster children, Rusty Blackbirds may be the most imperiled. What data do we already have, and what more can we do?

- The Alaska Bird Observatory has completed a RUBL status review for Alaska.
- ADF&G's Comprehensive Wildlife Conservation Plan includes a RUBL species assessment.
- Alaska Natural Heritage program is writing an expanded species assessment for RUBLs.
- Expanded roadside wetland surveys and BBS routes in the Yukon pick up RUBLs. Found two nests and conducted observations in 2004.
- Mine existing waterfowl survey and hydrology data, check for presence of RUBLs, and see if there is a correlation with water levels.
- RUBLs were abundant in statewide refuge surveys performed a few years ago.
- Everyone check with their land management unit to see if there is any information on RUBLs.
- Write a white paper similar to an endangered species recovery plan. Must be range-wide, which means involving partners.
- Partner with Outside researchers to look at what's happening on wintering grounds.
- Recruit citizen scientists and birders to help locate and count RUBLs. Could do a 1-2 day simultaneous count around the state (as was done in California for the Mountain Plover). Set up an E-Bird portal so Alaskans can enter RUBL sightings. Promote these through newsletters (ABO, Audubon, etc.).
- Should not look at just roadside wetlands for RUBLs (biased). Need to compile info on where RUBLs aggregate, not just breed.
- Develop a standardized wetland characterization form for everyone to use.
- Get volunteers to work on a committee addressing RUBLs.

In response, a new Rusty Blackbird Task Force was formed. Initial members include Wendy Nixon, Pam Sinclair, Steve Matsuoka, Chris Harwood, Susan Sharbaugh, Stan Senner, Carol McIntyre, Herman

Griese, and Colleen Handel. Mary Rabe, Jack Whitman, Kari Rogers, Jody McClory, Ted Swem, and Brian McCaffrey will also be asked to join.

EDUCATION AND OUTREACH

Compiler: Nancy DeWitt and Tricia Blake, *Alaska Bird Observatory*

The number of bird-related education programs offered throughout Alaska and the Yukon has increased notably in recent years. Rather than highlight just a few of 2004's programs or those limited to landbirds, we have compiled a list of current programs, web sites, teaching materials, and outreach efforts (by no means complete) and contact information. This list illustrates a considerable effort by individual agencies and organizations towards two of the objectives of Boreal Partners in Flight.

BPIF Objective #1: Educate the public about the conservation of birds and their habitats.

- *International Migratory Bird Day* – At least six communities in Alaska and the Yukon conduct IMBD events in April or May: Anchorage, Fairbanks, Yukon Delta National Wildlife Refuge (Bethel), Tongass National Forest-Juneau Ranger District, Tetlin National Wildlife Refuge (Tok), and the Yukon Bird Club in Whitehorse. For information about International Migratory Bird Day, see www.birdday.org/
- *Youth Programs*
 - Audubon Bird Academy and the Songbird School Habitat Stewards: Audubon Alaska (www.audubon.org/chapter/ak/ak/m2item1.html)
 - Alaska Bird Camp and Saturday/school break family programs: Alaska Bird Observatory (www.alaskabird.org/ABOEducationalOpport.html)
 - Junior Duck Stamp Program: Yukon Flats NWR, Kenai NWR
 - Classroom/home-school programs: Alaska Bird Observatory-Fairbanks area (www.alaskabird.org/ABOYouthEducation.html), Fairwinds Wildlife Services-Palmer (fairwinds@briloon.org), Rural Waterfowl Hunter Education Program-Anchorage (george.constantino@fws.gov), Togiak NWR-Dillingham (rob_macdonald@fws.gov), Alaska Department of Fish & Game-Nome (susan_steinacher@fishgame.state.ak.us), Prince William Sound Science Center (www.pwssc.gen.ak.us/pwssc/pwssc.html)
 - 5th Grade Birdwatch: ADFG-Fairbanks (mark_ross@fishgame.state.ak.us)
 - Day/overnight camps with migratory bird emphasis: Tetlin NWR (heather_n_johnson@fws.gov)
 - Alaska Waterfowl Calendar: USFWS/Audubon Alaska (www.audubon.org/chapter/ak/ak/m2item2.html)
 - High-School Field Ornithology summer class: Tetlin NWR (mary_timm@fws.gov)
- *Bird-specific Teaching Materials, Curricula & Resources*
 - Shorebird Sister Schools Program- USFWS-Migratory Bird Management: (www.fws.gov/~r7enved/sssp.html)
 - Sea Duck Joint Venture (www.seaduckjv.org)
 - Eider Journey Science Program: USFWS-Fairbanks Field Office (neesha_wendling@fws.gov)
 - Migratory Bird Curriculum: Tetlin NWR & Alaska Gateway School District (heather_m_johnson@fws.gov)

- Fly Away and To Hatch or Not to Hatch? Teaching units using Golden Eagle data Denali National Park/ParkWise (www.nps.gov/akso/ParkWise/Teachers/TeacherResources.htm)
- Sea Ducks of Alaska Curriculum, Activity Guide, & Teaching Kit; Alaska Endangered & Threatened Species of Alaska Activity Guide: Center for Alaskan Coastal Studies (www.akcoastalstudies.org)
- Education kits: ADFG-Fairbanks (mark_ross@fishgame.state.ak.us), Alaska Public Lands Information Center-Fairbanks (907-456-0527), APLIC-Anchorage (907-271-2741)
- Explore the World with Shorebirds! curriculum on CD and Learn About Seabirds: USFWS-Anchorage (tamara_mills@fws.gov)
- Boreal Forest Songbirds of Alaska teaching unit: Alaska Bird Observatory (www.alaskabird.org/bfsunit/index.html)
- Conservation Education Kits (loons & Alaska raptors): ADFG Wildlife Conservation (www.wildlife.alaska.gov/education/wilded/kits.cfm)
- Raptor curriculum: Alaska Raptor Center (www.alaskaraptor.org)
- Watchable Wildlife Bird Resources: ADFG Wildlife Conservation (www.sf.adfg.state.ak.us/statewide/aquaticed/teacherresource.cfm)
- Alaska – A Bird’s Eye View: Alaska Space Grant Program (www.uaf.edu/asgp/k12/)
- *Bird Banding Demonstrations* - Albert Creek Banding Station (plus@northwestel.net), Alaska Bird Observatory-Fairbanks (tblake@alaskabird.org), Tetlin NWR-Tok (heather_n_johnson@fws.gov), Denali Institute-Camp Denali (david@denaliinstitute.org), Tongass National Forest-Juneau Ranger Station (gballuss@fs.fed.us), Campbell Tract-Anchorage (Bruce_Seppi@ak.blm.gov)
- *Birding*
 - Wings Over Alaska birding checklist & certificates: ADFG-Juneau www.wildlife.alaska.gov/viewing/wings/wings_hm.cfm
 - Workshops, walks, and field trips: Yukon Bird Club (www.yukonweb.com/community/ybc/), Audubon chapters (www.juneau-audubon-society.org, www.arcticaudubon.org, www.anchorageaudubon.org) Alaska Bird Observatory (www.alaskabird.org), Denali Institute (www.alaskanha.org/denali-institute.htm), Fairwinds Wildlife Services, Friends of Creamer’s Field (www.fairnet.org/agencies/creamers/index.html), Yukon Delta NWR-Bethel (donna_hanley@fws.gov)
 - Recent postings from the Alaska Birds ListServe (www.birdingonthe.net/maillinglists/ALAS.html)
- *Recent Birding Publications*
 - *Field Guide to Bird Nests and Eggs of Alaska’s Coastal Tundra*: Alaska Sea Grant (www.uaf.edu/seagrant/Pubs_Videos/Pubs.html)
 - *Birds of Denali*: Alaska Natural History Association (www.alaskanha.org)
 - *The Birds of Yakutat, Alaska*: USDA Forest Service
 - *Alaska Owlmanac*: ADFG-Fairbanks (mike_taras@fishgame.state.ak.us)
 - *A Birder’s Guide to Alaska*: American Birding Association (www.americanbirding.org/abasaes/index.html)

- Important Bird Areas map: American Bird Conservancy (www.abcbirds.org/iba/ibamap.htm)
- *Common Winter Feeder Birds of Alaska* posters: Alaska Bird Observatory
- *Guide to Kodiak Birding and Hiking*: Kodiak Audubon
- *Ten Great Places to Go Birding in Whitehorse* brochure: Yukon Bird Club
- *Other Outreach*
 - Radio programs: U.S. Forest Service-Regional Office (www.fs.fed.us/r10/ro/educators), Togiak NWR, ADFG Wildlife Conservation (www.wildlife.alaska.gov/pubs/soundswild/sw_home.cfm)
 - Newspaper articles: Tongass National Forest, Alaska Bird Observatory
 - Newsletters: Audubon chapters, Audubon Alaska, Alaska Bird Observatory, Wings Over Alaska, Yukon Bird Club, American Bird Conservancy (www.abcbirds.org)
 - Presentations and seminars: Yukon Bird Club, University of Alaska Fairbanks, ADFG, Alaska Bird Observatory, Rural Waterfowl Hunter Education Program, USFWS-Fairbanks Field Office, Alaska Zoo, Denali Institute
 - Publications & handouts specific to birds and bird conservation: Audubon Alaska, ADFG, USFWS
 - Captive bird programs: Bird TLC-Anchorage (www.birdtlc.net), Alaska Raptor Center-Sitka (www.alaskaraptor.org/), Sheep Creek Wild Bird Center-Fairbanks (hawkins@ptialaska.net), Alaska Zoo (klarson@alaskazoo.org)
- *Citizen Science*
 - Christmas Bird Counts: numerous communities
 - North American Migration Counts: Tetlin & Togiak NWR
 - Great Backyard Bird Count: Juneau Audubon Society (www.juneau-audubon-society.org), Togiak NWR
 - Project Feederwatch/FeederCount: Togiak NWR (rob_macdonald@fws.gov), Alaska Bird Observatory with ADFG-Fairbanks (ssharbaugh@alaskabird.org)
 - Alaska Loon Watch: USFWS Migratory Bird Management (<http://alaska.fws.gov/media/imbwatch.html>)
 - Owl surveys & research: ADFG-Fairbanks (jack_whitman@fishgame.state.ak.us), US Forest Service-Yakutat Ranger District (mattmoran@fs.fed.us)
 - Frosty Feathers: Alaska Bird Observatory (www.alaskabird.org)
- *Web cams and web sites not already listed:*
 - Boreal Partners in Flight (www.absc.usgs.gov/research/bpif/bpif.html)
 - Denali National Park (www.nps.gov/dena/home/resources/Wildlife/birdweb/index/homebirdpage.htm)
 - Pratt Museum (www.prattmuseum.org/?id=36)
 - Anchorage Audubon Loon Cam (www.anchorageaudubon.org/loonsnaps/looncam.html)
 - Friends of Cooper Island-Black Guillemot research (www.cooperisland.org)
 - Boreal Songbird Initiative (www.borealbirds.org)

- Bird Species and Distributions in Yukon-Charley Rivers National Preserve (www.nps.gov/yuch/Expanded/key_resources/birds/inventory.htm)
- ADFG Sandhill Crane satellite tracking (www.wildlife.alaska.gov/index.cfm?adfg=waterfowl.crane)

BPIF Objective #2: Share information about our birds with people who live where our birds migrate and winter

- Festivals
 - Celebration of Swans-Marsh Lake, Yukon Territory (www.environmentyukon.gov.yk.ca/viewing/shcos.shtml)
 - Ketchikan Hummingbird Festival (1-800-770-3300)
 - Copper River Delta Shorebird Festival-Cordova (www.ptialaska.net/~midtown/)
 - Kachemak Bay Shorebird Festival-Homer (www.homeralaska.org/shorebird.htm)
 - Faro's Crane & Sheep Viewing Festival-Faro, Yukon Territory (www.faroyukon.ca)
 - Upper Tanana Valley Migratory Bird Day Festival-Tok (heather_n_johnson@fws.gov)
 - Tanana Valley Sandhill Crane Festival-Fairbanks (www.fairnet.org/agencies/creamers/index.html)
 - Alaska Bald Eagle Festival-Haines (www.baldeaglefestival.org)
- Programs specific to tourists: Alaska Bird Observatory, Denali Institute, National Park Service
- Presentations in other states: Audubon Alaska
- Boreal Songbird Initiative (www.borealbirds.org)
- Shorebird Sister Schools Program (www.fws.gov/~r7enved/sssp.html)

INVENTORY AND MONITORING

Monitoring Landbirds in Alaska: Status of statewide programs and recommendations for future sampling.

Author: BPIF; presenter: Karen Oakley, *U.S. Geological Survey*

(Note: this summary was gleaned from the meeting notes)

Based on discussions at the 2003 BPIF meeting (see pp. 11-12 of 2003 BPIF Annual Report for background), an ad hoc committee met at the 2004 Alaska Bird Conference to discuss developing a monitoring framework document for Alaska. The audience of the framework document was BPIF, as well as land managers who make decisions that fund landbird monitoring. The committee was comprised of: Melissa Cady, Nancy DeWitt, Colleen Handel, Chris Harwood, Steve Matsuoka, and Karen Oakley. Several teleconferences followed the meeting at the Alaska Bird Conference. Karen Oakley presented the following update on the document's progress:

The reasons for developing this framework were as follows:

- Landbird monitoring is a distributed effort that will only work at the statewide scale with everyone working together
- We need an overall strategic plan that covers all landbird programs and that everyone can see their role in
- It could help in marketing the program (i.e., building support and attracting funding)
- We avoid a piecemeal approach and competing against each other for funding.

The current outline of this document are as follows, but it requires input from BPIF as a whole:):

- Executive Summary
- Introduction
- Objectives
- Monitoring Program Descriptions (brief; same format for each; mainly descriptive and could include the main things we are getting from each program; also provides advantages and disadvantages of each program; contact information).
 - Breeding Bird Survey
 - Alaska Off-road Breeding Bird Survey/ALMS
 - Migration Monitoring
 - MAPS
- Integration and Recommendations (it will be made clear why these multiple programs are complementary and how they provide various participation options; recommendations for where we want statewide monitoring to be in five years.

The following items are presently missing from the document:

- Recommendations for what to focus on in the next 5 years (we need decisions that represent what the entire BPIF membership thinks is best; perhaps this could be a task for the newly formed Steering Committee). For example, how are raptors to be treated (with songbirds? separately?)
- Examples of "results" we have gained from each program (Karen pointed out that this would seem to be important for funding.

The major impetus for this document was to get more support from resource managers by explaining why we are doing these programs and what information we get from each program so they can make decisions on what is the best way to allocate limited funds. Because BPIF is somewhat of an *ad hoc*, loose

organization, we don't want to be overly structured; however we do need to show that we accomplish more working together.

Karen proposed that BPIF needs a group decision as to where do we want to go in next five years. We want to get all programs described in one place and provide a vision of where we want to go in next 5 years.

Colleen Handel collected volunteers to review the document. The document was slated to be finished by May 2005, but to date it remains in draft form.

Update on the Memorandum of Understanding for the Alaska Landbird Monitoring Survey

Compiler: Steve Matsuoka, *U.S. Fish and Wildlife Service*,

A memorandum of understanding (MOU) was developed to establish a framework for collaboration among agencies to implement the Alaska Landbird Monitoring Survey, including the use of standardized methodology, the sharing of information obtained through the program, and the periodic assessment of the program's efficacy in meeting its stated goals. The MOU does not imply a commitment of money by any agency. The following people were instrumental in the development of the MOU: Gene Augustine, Nancy DeWitt, Tracey Gotthardt, Ruth Gronquist, Colleen Handel, Steve Kendall, Robert Leedy, Jeff Mason, Carol McIntyre, Stan Senner, and David Tessler.

Verbal agreements to sign the MOU have been obtained from the senior administrators in Alaska with the Alaska Bird Observatory, Alaska Department of Fish & Game, Alaska Natural Heritage Program, Bureau of Land Management, National Audubon Society, National Park Service, USDA Forest Service, U.S. Fish and Wildlife Service, and U.S. Geological Survey. The MOU did not meet the requirements of the Department of Defense (DoD); however, we will work on developing a specific MOU with the DoD once the multi-agency MOU is signed by all parties. As of 29 March 2005, the MOU was routed for signatures and on 1 August 2005, the final signature was obtained. A copy of the final MOU was provided to members of Boreal Partners in Flight and will be posted on the BPIF website. Now that the document has been signed, we will need to think carefully about how to use this agreement effectively to help fully implement ALMS.

Contact: Steve Matsuoka, U.S. Fish and Wildlife Service, Migratory Bird Management, 1011 E. Tudor Rd., ms 201, Anchorage, Alaska 99503

Continuing obstacles to wide-scale participation in the Alaska Landbird Monitoring Survey and strategies to mitigate

Presenter and discussion leader: Colleen Handel, *U.S. Geological Survey*
(Note: this summary was gleaned from the meeting minutes)

This session started with a short presentation by Colleen, followed by a discussion led by Colleen, who was joined by a panel of biostatistical veterans including: Melissa Cady, Carol McIntyre, Joel Reynolds, Joel Schmutz, and Bill Thompson.

Presentation Summary:

Access and Funding are two of the main obstacles to the success of the ALMS program. Quite often these two obstacles are closely tied.

Issues with the systematic random sample of blocks in the study design:

1. Defining a sampling universe before the survey begins allows one to make statistical inferences about the entire universe based on a randomly selected sample. However, we found that access problems in some areas can severely limit the random selection of blocks and points in ALMS. For example, in the Tongass NF, we had to examine 26 randomly selected blocks in order to select 5 that were able to be surveyed, as 6 were deemed too steep/inaccessible, 12 were glaciated; and 3 had too many brown bears. Such discrepancies between the intended and the actual sample will affect the scope of inference. One advantage, however, is that one can characterize the samples that could and could not be surveyed.
2. Some sort of randomization process is advisable, regardless of imperfect characterization of which areas we can actually survey. When we compared results from random versus convenience sampling, we found 2 noteworthy concerns regarding non-random samples:
 - a. Species composition differed significantly in these two types of surveys.
 - b. Estimates of density differed and population trends were likely to differ between the two types of surveys; however, we do not have long-term data sets from randomly selected samples yet to determine if population trends would differ.
3. Randomly deployed blocks are expensive and difficult to reach.
4. One will likely get low numbers of detections in some habitats. This is:
 - a. Valid for density estimates,
 - b. Valid for habitat modeling,
 - c. Inefficient for estimating population trends because of low numbers of detections but trend estimates are valid.

Possible solutions:

1. We can separate our inventory versus our monitoring efforts.
2. We can design our monitoring by stratifying by access (which often equates to cost).
 - a. We can keep biennial rotation, but with more samples in accessible and fewer in less accessible blocks, and then analyze the difference between them.
 - b. We can use a panel rotation w/ less accessible blocks visited less frequently.
3. We can incorporate alternative methods for monitoring more intensively in habitats expected to host higher densities of birds, including:
 - a. river routes surveyed by boats, and
 - b. riparian routes surveyed on foot (on arctic and subarctic coastal tundra).
4. We can try to maximize detections in other high-density habitats and reduce sampling in low-density habitats (e.g., alpine tundra).

Discussion summary:

Accessibility is a huge issue with ALMS, mainly because of the associated costs (e.g., fuel prices continuing to rise); thus, it must be addressed at some point. ALMS is not the only program with this problem, as this has been a concern with the new Denali NPP inventory and monitoring program.

When Colleen was researching an appropriate sampling design for ALMS, she was discouraged by fellow statisticians from using a “rotating panels” frequency scheme. Rotating panels work great if you never have holes in your data, but they are a nightmare to deal with statistically if you do have holes. The biennial scheme that was recommended takes advantage of the fact that there is a high correlation between blocks done in adjacent years; by going to every two years instead, one loses little statistically, yet essentially doubles one’s sample size.

Denali NPP elected to use rotating panels (40 grids total) because it increased their number of samples, despite the analytical burden associated with such a scheme. Denali ensured that ample biostatistical partnerships were in place to deal with potential worries. Carol McIntyre pointed out, however, that

partnerships take money and primary investigators need to remember to leave in place a good sampling system in case they depart (e.g., change stations, retire, etc.). It is important to contract/work with statisticians to build your study design and develop software that's based on your design. Analyses based on rotating panels are not easy, as there will always be missing data (i.e., one will never have a perfect rotating panel). Sometimes people elect to use rotating panels and then choose a subsample in one area; one definitely wants to avoid that. This leads to confounding at the spatial as well as the temporal scale. One needs to get good spatial coverage every time.

While it would be great to make sampling more convenient (e.g., sample only areas for which access was not an issue), we do not want to lower the bar so much that the sampling design loses robustness. An option for reducing costs of access would be to stratify around a particular parameter (e.g., sampling around road system, etc.) and to sample more intensively in these more accessible areas. Less accessible areas (e.g., those requiring helicopter access) could be sampled less intensively both in terms of number of samples and frequency of surveys. However if one doesn't sample this stratum intensively enough (i.e., not enough blocks or enough replicates through time), one won't have enough data points to detect trends. If plans are to compare accessible versus inaccessible areas, one must ensure that there is adequate sampling effort in the less accessible stratum so that one can know if the same population trends are occurring as those detected in the more accessible stratum.

The goals of ALMS are multiple: trend estimates, species richness, delineation of geographic range, documentation of habitat use, etc. However, it begs the question as to whether we can achieve all of our goals with a single sampling design. For example, to detect population trends for a given species, a sampling design that has samples concentrated in areas of high density and fewer samples in areas of low density would be optimal. To detect changes in distribution over time (e.g., in response to changes in treeline or permafrost or glaciers as global temperatures increase), it would be optimal to have transects that span the gradients over which changes are likely to occur. That means that true zeroes (e.g., no birds on a current glacier field) have value—these might not be zeroes in the future. Finally, if we want to understand patterns of distribution in relation to habitat, we need to sample areas where species do not occur in addition to where they do occur. Because we are attempting to gather data on all landbirds (as well as many other species), there is no way to design a monitoring program that will be optimal for all of these goals and species. We again fall back to a survey design that samples all prospective habitats for all species included in the program; the program must include some aspect of randomization to make inferences about areas not sampled.

Making such a program affordable comes back to making a large number of sampling units accessible. However, standardizing the definition of “accessibility” is difficult as it is vastly different at different sites and at different times. For example, some contributors may be able to afford helicopters, while some cannot. Some places are precluded by policy from using helicopters (e.g., in some wilderness areas) and others might not even have local access to helicopters. In big wildfire years, the availability of helicopters may be dicey, despite having the resources to afford them. Bud Johnson (Tetlin NWR) suggested that one first consult with one's pilots and have them map everywhere they can go (accessible). Bud believes stratifying by accessibility is do-able. However, Melissa Cady found difficulty in stratifying by accessibility (i.e., mapping out accessibility ahead of time) in Tongass NF because a lot of the cliffs are hidden under trees, etc., and might not be detectable even using good GIS data or aerial photographs.

If we do pursue merely “accessible” sites, we run the risk of ALMS being relatively equivalent to the Alaska Off-road BBS (i.e., convenience sampling), which will generate information only pertinent to the areas being sampled, and not to the broader regions of the state. Also, some habitat types (e.g., remote tundra) fall out when restricting sampling only to areas accessible by foot or road. However, tundra habitats (e.g., North Slope, Yukon-Kuskokwim Delta, etc.) really do not support the diversity or the species that we (i.e., BPIF) are primarily concerned about, as much as riparian areas do. One option is to

perhaps buffer around accessible rivers in tundra regions and sample riparian and non-riparian strata from there. Setting up strata this way will make it more difficult to obtain estimates of population size and density, but perhaps these are less important goals that should be compromised so that we can obtain more efficient estimates of population trends for key species. Another option would be to stratify based on where one's base of operation is and what's accessible to that. In general it is imprudent to stratify by habitat as habitat is often subject to change which confounds long-term monitoring. Once strata are set up, it is difficult statistically to redefine them in the future, even if criteria for defining accessibility change.

Clearly the access/cost obstacle to ALMS is a difficult issue to resolve in a meeting. BPIF members (and their employers) have individual/station concerns above and beyond shared BPIF concerns. Can we have the ability to have different monitoring schemes to address statewide, as well as more individual issues (e.g., species of concern, riparian areas, shorter-term management issues)? With only 20% participation in ALMS to date, there definitely is a need to recognize the myriad responsibilities of potential participants (outside of ALMS), and perhaps modify our sampling to accommodate folks. If we are under-sampling for the present design, and the prospects for greatly increased participation is dubious, maybe we need to redesign to what we can effectively sample. One option is to perhaps scale back biogeographically. For example, do we want to spend a lot of money, or have so many samples in say, NPRA, Y-K Delta, Arctic NWR, when all we might get are Lapland Longspurs and Savannah Sparrows in the tundra plots. It might be more biologically meaningful to sample more intensively in their riparian areas where diversity and densities are likely higher.

We always go back to the fact that no single (or at least very few) land management units can do this kind of monitoring (i.e., for population trends) on their unit because they lack the resources to achieve an adequate number of samples. If you want information on your unit, you are going to have to have a lot of effort spread out on your land unit (e.g., Denali NPP). Because most land management units cannot afford to do that, the idea of ALMS was to pool our efforts, look at a larger area, and then be able to say something meaningful. It inevitably comes down to finding that balance between meeting your individual land management unit objectives and actually getting meaningful monitoring.

One prospect that looks particularly promising is to combine data from ALMS with those of the roadside BBS to monitor population trends. Colleen Handel is working with John Sauer, USGS Patuxent Wildlife Research Center, on a joint analysis of data collected in Alaska on the BBS and the Off-road BBS. As of 2004, we have 92 BBS and 85 ORBBS routes that were each surveyed by the same observer for at least three years (a requirement for BBS analysis of non-distance-sampling surveys). Although the ORBBS routes were non-randomly selected, this exploratory analysis should tell us whether or not such a joint analysis might work. Using such an approach should enable us to (1) increase our power to detect trends; (2) increase the scope of inference outside the road corridor; and (3) tell us whether population trends are similar within and outside of roadside corridors. Such an approach might be particularly appropriate for combining riparian surveys with roadside surveys. There are also other approaches (e.g., Bayesian) we can use to combine data from different surveys (e.g., ALMS and BBS) to increase power to detect population trends. One difficulty will be in determining how best to weight each of the surveys to estimate an overall population trend if the trends from each survey do differ significantly.

At the discussion's end, Colleen collected names of volunteers to help hammer out the questions regarding sampling design and accessibility, including most of those who have gone through the ALMS sampling themselves.

MISCELLANEOUS ITEMS

A. Upcoming Meetings

1) The **2005 annual Boreal Partners in Flight meeting** is scheduled for Wednesday and Thursday, December 7-8, in the Gordon Watson Conference Room at the USFWS Regional Office/Alaska Science Center, 1011 East Tudor Rd., Anchorage, AK. It will again be held back-to-back with the **Alaska Shorebird Group annual meeting**, which meets December 5-6. The conference room is reserved for Friday as well. Those interested in locations available for breakout groups should talk to Steve Matsuoka (907-786-3672).

2) The **11th Alaska Bird Conference** will be held in Juneau, February 7-9, 2006. A formal announcement and call for papers will be issued in October 2005. Contacts: Michelle Kissling, (907) 780-1168, michelle_kissling@fws.gov; Debbie Groves, (907) 780-1174, debbie_groves@fws.gov. Visit the conference web site at <http://www.abc2006.juneau-audubon-society.org/>

3) The next **BPIF Western Working Group** meeting will be held in Lockeford, CA, November 2-4, 2005. This will be a monitoring coordination meeting. Further details and agenda will be available in the coming months.--Kim Kreitinger (kkreitinger@prbo.org)

4) The **13th Annual Conference of The Wildlife Society** will be held in Anchorage, Alaska, September 23-27, 2006. There is a call for symposium, workshop, and special poster session proposals; deadline is October 31, 2005. See more details on the web site at: <http://www.wildlife.org/conference/index.cfm?tname=2006cfs>

B. Other Stuff

1) We will be looking to nominate and select a new chair or co-chairs for Boreal Partners in Flight at the December meeting. It is a 2-year commitment. The current chairs will be responsible for producing the annual report and project summary for the 2005 calendar year (i.e., your first task will be to construct an agenda for the annual meeting in December 2006).